

Remarks

Thank you for your work in connection with this application. The Office Action has been reviewed with care. Following are Applicant's remarks responsive to the Office Action.

Response to Rejections

Rejection under 35 U.S.C. § 112

Claim 13 was rejected under § 112, second paragraph. Reconsideration is requested in view of the amendment to claim 13. The amendment does not change the scope of claim 13 but merely clarifies the particles which are referred to.

Rejections under 35 U.S.C. § 103(a)

Claim 9-28 stand rejected under 35 U.S.C. § 103(a). Each rejection relies on the combination of U.S. Patent Nos. 4265957 (Severence), 4781987 (Bolgiano), and 4701481 (Bogan) as the primary basis for the rejection. The secondary references are cited with respect to aspects of dependent claims and do not support any claim rejections in and of themselves. Because the combination of Severence, Bolgiano, and Bogan does not teach or suggest the tile-product material of claims 9-28, all of the rejections must fall.

Fundamentally, Severence cannot support the rejections because Severence has materials and objectives which differ significantly from that which is set forth in Applicant's claims 9-25. Severence is floor-coating system in which a series of layers are built up on an existing floor surface. The floor surface is most typically concrete but can be wood, steel, brick and the like. Severence at col. 3, lines 9-14. The layers applied over the floor in the following order, bottom to top:

Severence Floor Coating

Layer #	Layer Type	Layer Material
1	Primer Coat	A “primer coat” of <u>liquid</u> epoxy resin. Severence at col. 3, lines 31-33.
2	Fiberglass-Reinforced Base Coat	A “fiberglass-reinforced base coat” of viscous epoxy resin coating rolled or troweled onto the primer coat with a fiberglass mat placed on top of the epoxy resin. Severence at col. 4, lines 40-45 and 53-55.
3	Top Coat	A “top coat” of epoxy resin including filler applied by a trowel or squeegee. The filler can be silica glass beads, metallic oxides such as aluminum oxide or organic fillers such as cellulosic materials. Severence at col. 5, lines 6-11 and 21-25.
4	Sealer Coat	A “sealer coat” of a polyurethane resin. Severence at col. 5, lines 57-62.

Severence differs from Applicant’s claims for at least the following reasons. First, Severence is not a material for making tiles or tile products as in independent claims 9 and 25 but, rather, is a floor coating system. Severence is applied to an existing floor surface by a worker in successive layers poured, spread, and/or troweled one-on-top-of the other.

Second, Severence does not include any first layer including silica sand, phenolic resin and spaces or pores as required by independent claims 9 and 25. As noted in the table, Severence’s first layer is an epoxy primer which is spread on an existing concrete floor. A coating of epoxy primer cannot be fairly likened to Applicant’s first layer as claimed. See, for example, Application at page 6, lines 1-12 and page 8, lines 6-17. Just one potential purpose of Applicant’s first layer is to allow moisture to dissipate through spaces between the silica particles. Application at page 8, lines 7-9. A layer of epoxy bonded to an existing concrete floor as in Severence has no such capability.

Second, the Examiner acknowledges that Severence does not include any second layer

with resilient material or elastomeric material as claimed by Applicant in independent claims 9 and 25. Severence never contemplated such a thing. There is no teaching, suggestion, or reason for combining a resilient material with any layer of the Severence floor coating.

Bolgiano is unlike Applicant's material of claims 9 and 25 and does not teach a second layer as in claims 9 and 25. (And, Bolgiano does not teach or suggest any other layer of Applicant's material as claimed.) Bolgiano is directed to a coating which is applied over a conventional resilient surface to make a floor covering. Bolgiano at col. 2, lines 30-34 and col. 3, lines 8-11. Other than being a floor covering including a conventional resilient surface, Bolgiano has nothing to do with Applicant's material as claimed.

Third, Severence (and Bogliano) does not include any third layer with both silica sand and silica flour as claimed. The top coat in Severence which is applied over Severence's fiberglass mat and base coat uses filler as a self-leveling agent. Severence at col. 5, line 9, and col. 5, lines 31-33 and 39-40. As Applicant's materials are for tile production, no such purpose is served by Applicant's third layer.

Bogan is unlike Applicant's material of independent claims 9 and 25 because Bogan is a coating for encapsulating and protecting electrical components such as micro-electronic devices and for use in adhesives. Bogan at Abstract. Bogan does not discuss floor tile products and does not include any of the three layers as set forth in claims 9 and 25. It is not known why a person of skill in the art would be interested in combining Severence and Bogan given that these references are from wholly different fields, have completely different objectives and have important structural differences.

In sum, Severence, Bolgiano and Bogan, taken separately or in combination, do not teach or suggest a material for use in making tile products as claimed. The motivation to combine these references is not known since Severence is a floor coating system, Bogan, while a flooring product, lacks the structure of Severence and Bogan has nothing to do with flooring. Since all applied references really teach away from what is claimed, Applicant respectfully submits that the Examiner would appear to be engaged in improper hindsight analysis without consideration of the invention as a whole. *See In re Wesslau*, 147 U.S.P.Q. 391, 393 (CCPA 1965) (it is

“impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art.”). *See also, In re Kotzab*, 217 F.3d 1365, 1369-1370; 55 U.S.P.Q.2d 1313 (Fed. Cir. 2000) (Every element of a claimed invention may be found in the prior art but identification of each part claimed is insufficient to defeat patentability of the whole claimed invention unless there is some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.) There is nothing in the applied references to suggest the claimed combination, and it is respectfully submitted that the Examiner's statements are unsupported by any reasoning other than that taken from Applicants' disclosure.

Since the combination of Severence, Bolgiano, and Bogan do not fairly render independent claims 9 and 25 obvious, it stands to reason that the combination cannot render dependent claims 15, 19, 20, 23, and 24 obvious. Reconsideration and withdrawal of the rejections is requested.

Claim 11 was rejected based on Severence, Bolgiano, and Bogan in further view of U.S. Publication No. 2003/0156901 (Britt). Applicant incorporates by reference the arguments distinguishing Severence, Bolgiano, and Bogan. Britt should not be combined with the other references because Britt is a pavement marking system; a field unrelated to tile material. Claim 11 requires that the resin is present in an amount of about 3 to 5 percent by weight of the silica sand of the first layer. However, Britt requires 20 to 80 percent of the “nonreinforcing mineral particles” suggesting that Britt has a lesser percentage of particles than in Applicant's first layer. Britt at paragraph 25. Accordingly, the applied combination does not render obvious Applicant's invention as a whole.

Claims 10, 12, 14, and 26 were rejected based on Severence, Bolgiano, and Bogan in further view of U.S. Patent No. 6,228,463 (Chen). Applicant incorporates by reference the arguments distinguishing Severence, Bolgiano, and Bogan. Chen is a surface covering with wear-resistant particles. Chen at Abstract. Preferably, the wear-resistant particles are present in the outermost surface of the surface covering which is exposed to the environment. Chen at

Abstract and col. 8, line 67 through col. 9, line 12. Chen Figures 8 and 10-11 include wear-resistant particles at or close to the surface of the surface covering. Chen at col. 10, line 23 through col. 11, line 59. Dependent claims 10, 11, 14, and 26 are all directed to aspects of Applicant's *first, or base, layer*, not the uppermost layer as in Chen. *See* Application, for example, at page 6, lines 1-12 and page 7, line 20 through page 8, line 17. Reconsideration and withdrawal of the rejections is requested.

Claim 13 was rejected based on Severence, Bolgiano, Bogan, and Chen in further view of US U.S. Patent No. 4,791,015 (Becker). Applicant incorporates by reference the arguments distinguishing Severence, Bolgiano, Bogan, and Chen. Claim 13, which depends on claim 12, requires pre-coated silica sand. The passage cited from Becker at col. 5, lines 40-48 refers to a "dry blend" in which the resin is a separate component. Becker at col. 4, lines 17-27. A full discussion of Becker's dry blend is at col 4, line 17 through col. 5, line 52. It is also noted that Becker discusses that what is being used is perlite or other "hollow particles." Becker at col. 5, lines 37-42. Becker differs generally from the subject matter of claims 9-28 for the reasons mentioned at pages 10 and 11 of Applicant's October 11, 2006 Amendment. Reconsideration is requested.

Claims 16, 17, 25, and 28 were rejected based on Severence, Bolgiano, and Bogan in further view of U.S. Patent No. 5,183,438 (Blom). Applicant incorporates by reference the arguments distinguishing Severence, Bolgiano, and Bogan. Blom is a sports court for playing sports such as volleyball and basketball. Blom at col. 1, lines 10-13 and 34-37. Blom does include, "a hard elastic layer 4 composed of granules or rubber particles bonded to one another by polyurethane glue, which layer has a thickness of approximately 9 mm." Blom at col. 2, lines 34-38. However, Blom's sports court is different from Applicant's claims 16, 17, 25, and 28 as a whole because Blom requires materials and construction unlike that which Applicant claims. Blom does not cure the deficiencies already noted with respect to the combination of Severence, Bolgiano, and Bogan. Reconsideration is earnestly requested.

Claim 18 was rejected based on Severence, Bolgiano, Bogan, and Blom in further view of WO 00/50707 (Verret). Applicant again incorporates by reference the arguments distinguishing

Severence, Bolgiano, and Bogan and the arguments distinguishing Blom. Verret, as best as can be understood from the English-language abstract, is a floor adhesive with 30-90 mesh rubber granules therein. Applicant respectfully submits that an adhesive is not in the field of material for making tile, that an adhesive is unlike a material for making tile, and that Applicant's claim 18 as a whole distinguishes Verret and the other applied references.

Claims 21 and 27 were rejected based on Severence, Bolgiano, and Bogan in further view of U.S. Patent No. 3,928,706 (Gibbons). As discussed previously, the combination of Severence, Bolgiano, and Bogan does not teach or suggest the subject matter of independent claims 9 and 25. Gibbons does not supply content missing from Severence, Bolgiano, and Bogan sufficient to support rejection of independent claims 9 and 25 because Gibbons' decorative laminate is based on joined together plural fibrous sheets. Gibbons at col. 2, lines 1-15. Since the base independent claims 9 and 25 are not obvious in view of these references, it follows that claims 21 and 27 are not obvious.

Claim 22 was rejected based on Severence, Bolgiano, Bogan, Gibbons in further view of U.S. Patent No. 4,504,523 (Miller). Miller is a modification of a conventional embossed vinyl or vinyl asbestos tile. Miller at col. 2, lines 20-25 and col. 4, lines 32-34. A plastic matrix and particles are located exclusively on the raised areas of the tile. A wear layer overlies the particles, matrix and tile. Miller at col. 1, lines 46-63. Miller is not close to the material claimed in independent claim 9 or dependent claim 21 on which claim 22 is based. As in the preceding paragraph, since the combination of Miller and the other applied references does not render claims 9 and 21 obvious, it follows that claim 22 should not be obvious. Reconsideration of the rejection of claim 22 is respectfully requested.

In re Patent Application of:
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Serial No. 10/823,516

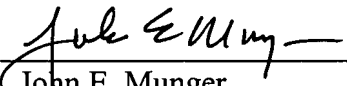
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Request for Interview

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly **requested to call** the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 10-0270. Kindly notify the undersigned in the event that the deposit account is debited or credited.

Respectfully submitted,

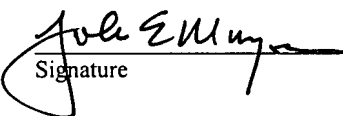
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April 30, 2007
Date